



PATENT ABSTRACTS OF JAPAN

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H04L 27/00(21) Application number: **06195789**(22) Date of filing: **19.08.1994**(30) Priority: **20.08.1993 US 93 109556**(71) Applicant: **ERICSSON GE MOBIL COMMUN
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(54) **DECODING METHOD USED FOR
POST-DETECTION SELECTING/
SYNTHESIZING DIVERSITY FOR MOBILE
AND INDOOR RADIO CHANNELS, AND
POST-DETECTION
SELECTING/SYNTHESIZING DIVERSITY
RECEIVER**

(57) Abstract:

PURPOSE: To provide metrics to be derived from the phase angle of a received signal in order to evaluate channel state information(CSI), to provide a method eliminating the necessity of a sound signal or a pilot for determining the CSI and to determine the CSI in a system capable of utilizing only a symbol phase angle.

CONSTITUTION: The characteristics of a communication channel are evaluated from a differential phase angle between the phase angle of a received signal and that of a corresponding transmitted signal. Signal-to-impairment ratio (SIR) as an indicator of CSI is

calculated by SIR calculating units 4a, 4b and mutually compared by a selective logic circuit 5 and a receiver branch of a high quality channel is selected by a branch selecting circuit 6. A maximum likelihood evaluation method or an evaluation method integrating mean SIR information for a Rayleigh phasing channel is used for calculation CSI metrics as a function of a differential phase angle between a received signal and a transmitted signal.

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